BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images, please do not report the images to the Image Problem Mailbox.

FIG. 1

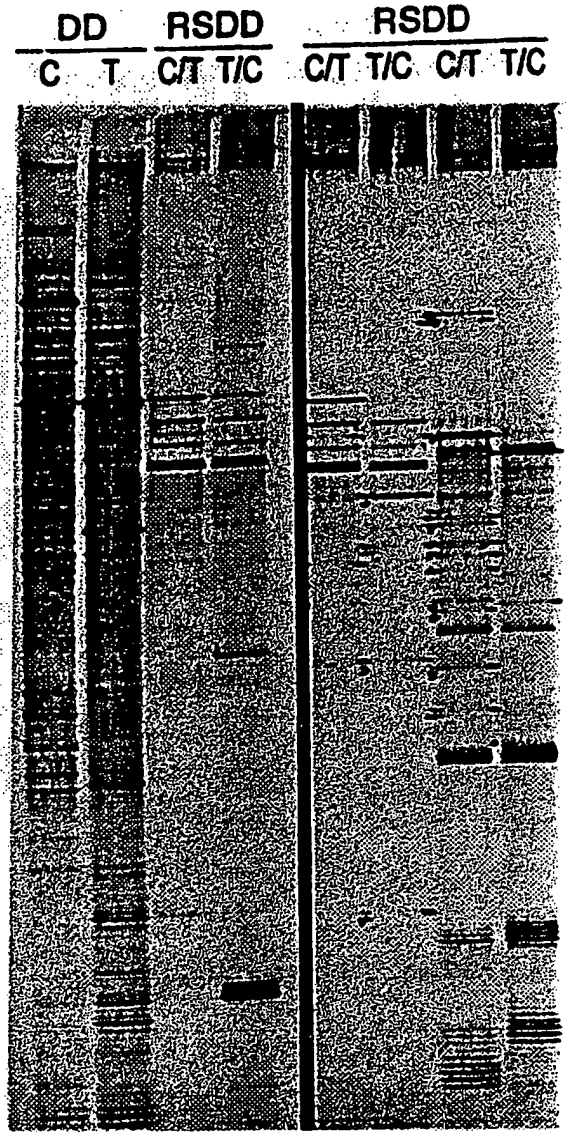

FIG. 2

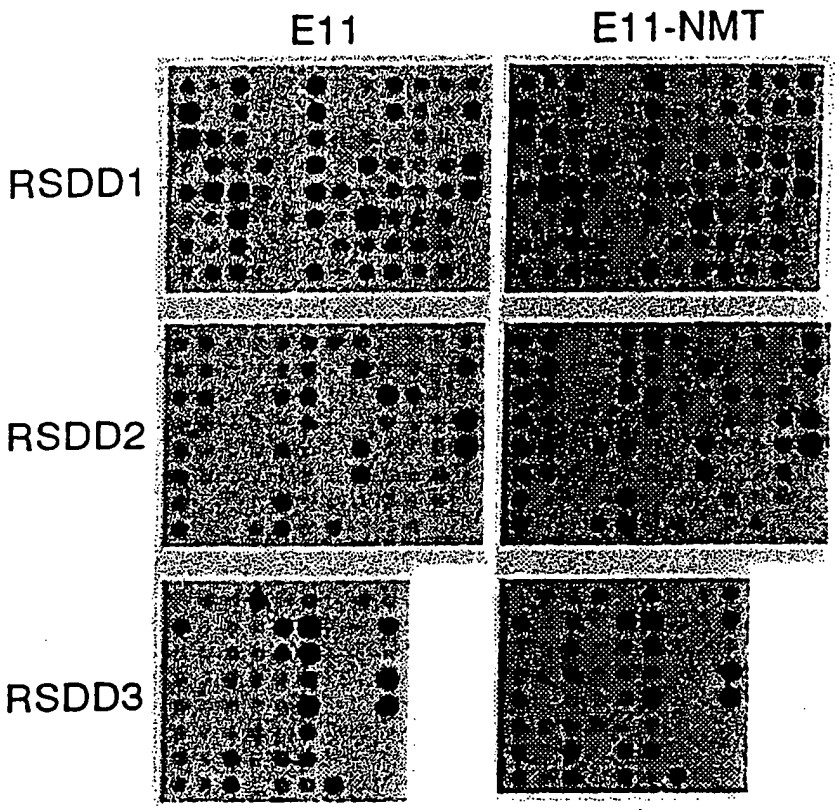

FIG. 3A

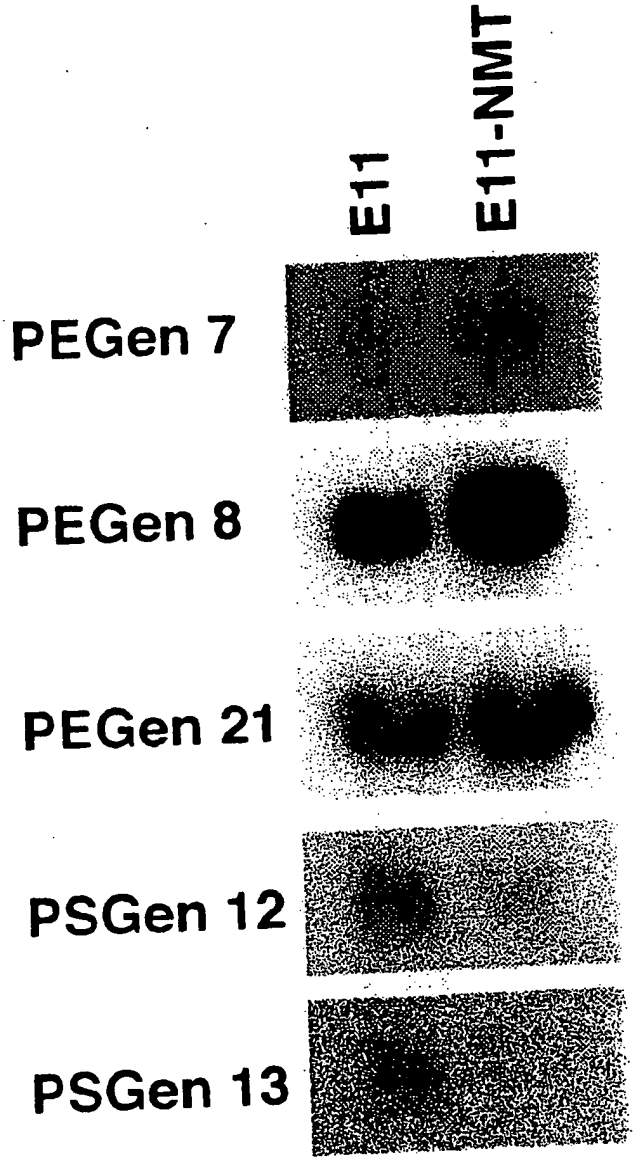

FIG. 3B

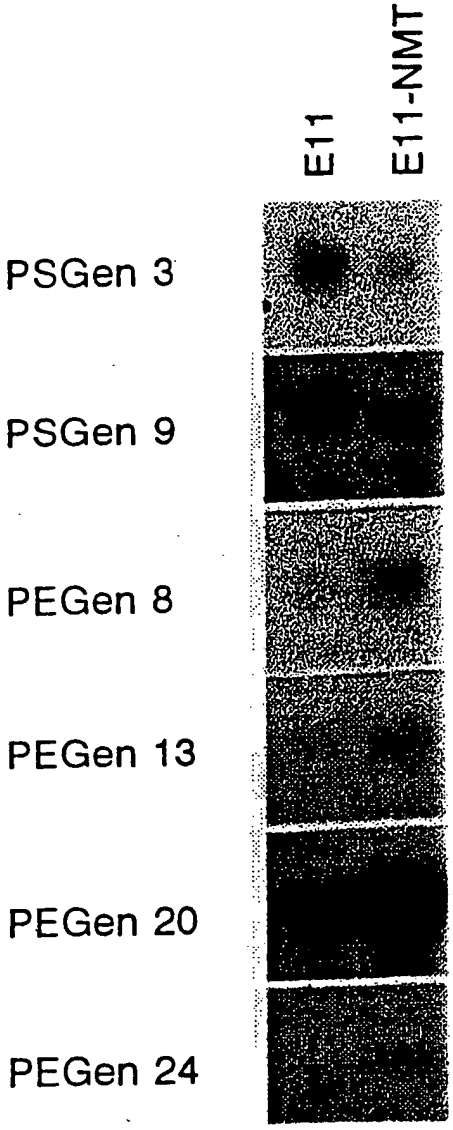

FIG. 4

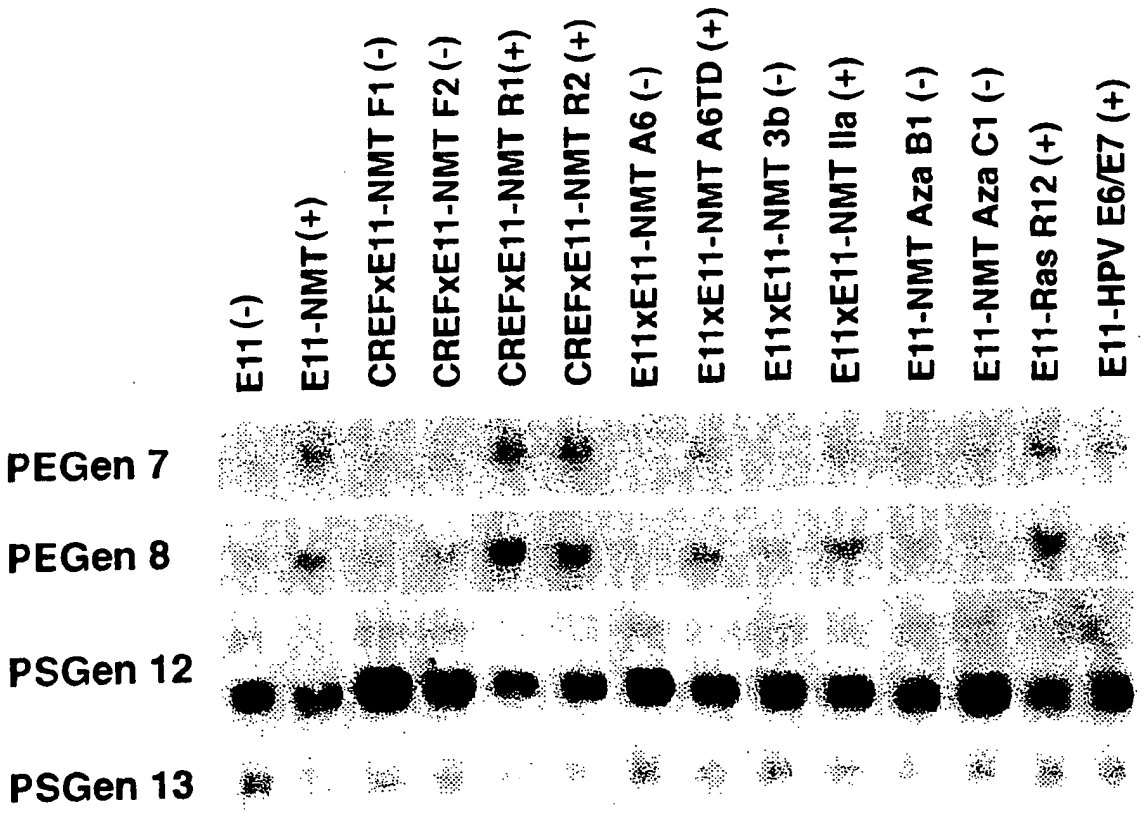
E11 (-)
E11-NMT (+)
CREFxE11-NMT F1 (-)
CREFxE11-NMT F2 (-)
CREFxE11-NMT R1(+)
CREFxE11-NMT R2 (+)
E11xE11-NMT A6 (-)
E11xE11-NMT A6TD (+)
E11xE11-NMT 3b (-)
E11xE11-NMT IIa (+)
E11-NMT Aza B1 (-)
E11-NMT Aza C1 (-)
E11-Ras R12 (+)
E11-HPV E6/E7 (+)
PEGen 7
PEGen 8
PSGen 12
PSGen 13

FIG. 5

PEGen 7-90% homology to human HPV16 E1BP

TAAANCGGTG GTACTGCTGC ACGGTCCTCC GGGTACTGGA AAGACATCCC
TTTGTAAGGC ATTAGCCCAG AAACTGACCA TCAGACTGTC AANCAGGTAC
CGGTATGGCC AGTTAATTGA AATAAACAGC CACAGCCTAT TTTCTAAGTG
GTNTTCAGAA AGTGGCAAGT TGGTAACTAA GATGTTCCAG AAGATTCANG
ACTTGATTGA TGATAANNAA NCTTTGGTGT TTGTCCTGAT TGATGANGTA
AGCACTCANN GGTACTCATT CTTNGTCTGC ATTGCCTCTT GCTATTACTG
CCTGATCCCT CTCATTTGGT TCACTGTGTC GCNANCTCTT TTCTATGGAT
CTTTTCCNAN CCACCCGTTT C

FIG. 6

PEGen 8-Rat phosphofructose kinase C

GTGACGTAGG GTCTGTTGCG TCAATGGTTA TAGCAAGTGA TGCTCTCTGA
TTATTACTGC TGACAATACT CGGCCAACAA TTCTTGCATA GAGTGCTGAT
AAATAACTAT GTTACAAAAA GGGGTGGTCC CTGGAGAACA TTACAGGCTT
CCCTAGGTAA GTGTGCAGGT CAGGAGACGG CATATTCAAT CAGATGGCTG
ATAGTTCTCC GTGGTTATGC ACCGGCTCCA GCTTGCCTAC GTCAC

FIG. 7

PEGen 13-Novel

GCAGCATGAT GAATTTAATG CAACAGTCAT AGCAGGGCAA GGGGAGAGAA
AGGCAGATGG ACTATCTGCA TCATCAAGCG AGGGCTTGTG TCGGCGGCTA
TGTGCAGAGA CGAGCAGGGC GAGGCACTTA AAAGCTGCTN GATGAAAATC
CACCCAGGAG AANTCTGGGC CTACGTCA

TGACGTAGGC CCAGACTTCT CCTGGGTGGA TTTTCATCCA GCAGCTTTTA
AGTGCCTCGC CCTGCTCGTC TCTGCACATA GCCGCCGACA CAAGCCCTCG
CTTGATGATG CAGATAGTCC ATCTGCCTTT CTCTCCCCTT GCCCTGCTAT
GACTGTTGCA TTAAATTCAT CATGCTGCCA AAAAAAAAAA A

FIG. 8

PEGen 14-Novel

GCCATAAATA CACTTTATTT CATTCGAAAT GCATAATCAC ACTGGGAGCA
CTCCCTTTGG AGCACTCCTC TAGCAGCAGG TCCGAAGTGC TCCAGCATCG
TCAGCTGGCT CCAACACCTA CGTC

FIG. 9

PEGen 15-Novel

TTTTTTTTTT TTTGGAAACA GAATAAAGTG CTTTATTCTC TGGCTGGCTC
TCCTACGTCA C

FIG. 10

PEGen 21-94% homology to mouse FIN 14

TCGGCGATAG CATTGGAGCA AGTCTTATCA GCAAGCAATG TTTTCAGTTA
TGTTTCAAAG TTAAGAATGG GTTTAAACTT GCTGAACGTA AAGATTGACC
CTCAAGTCAC TGTAGCTTTA GTACTTGCTT ATTGTATTAG TTTANATGCT
AGCACCGCAT GTGCTCTGCA TATTCTGGTT TTATTAAAAT AAAAAGTTGA
ACTGCAAAAA AAAAAA

FIG. 11

PEGen 24-Novel

TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TNGCCAGGCT
ATGTCTCAGA CTTTATTATT ATTATTATTA TTATTATTAT TATAAATAAA
ACATGTNCTT TCAATTAGGT TACAANAGTA TTTATCTCCA TAACGCTTCT
TCATACATCC TTAGTTTTGG ATTAAAGTAC CATCCACCCC AACTCAAACT
GTAACCCCCA GTAATCCCCT CTAACGTGGA AATTTCTGGT TTAACAACTC
AGTTAACTGC CCCACAAACA GTGGGAGGCC GCTCTTGCAT GGCTATGCCA
CGTAACCCTT CACTGCTTCA CTTCTTCGCT GGCT

FIG. 12

PEGen 26-Rat poly ADP-ribose polymerase.

GACCGCTTGT ACCATCCAAC TTGCTTTGTC TTCTGCAGAG AGGAGGCTAA
AGCCCTTGAG CTGGCTGGCA CTGTACTCAG GCCGGAAGCC CAGCTCGTCC
CGGTTCTTGA CAAAGCAAGT TGGATGGTAC AAGCGG

FIG. 13

PEGen 28-Novel

TGCCGAGCTG GGTATTGTGA CGGTTGATAA TGGCGGCATC ATGTTGCCAG
GTACCGGGTA AGCAGACCTC AGAGCACAGC TTATTGTCCA GTGCTTTCAC
GCTCGCGACG TCAAAGTCAT TGTTATTGTC ACACTCCATG CCTAGAAATG
CGCATGTCCT CTGGCCATCT TCTTGCACAG GGGATCTGTC CTCTTCCTCC
ATGATATCAT TTCCCTCTGC ATCCTGCTCT CCAGCTGGAA GGCCAGCAAA
ATTGCTGTCT GGGGACTCTG CTGGGGTCTC CTCCTCTTCT GAAGGGGCCC
TGCTAGCAGC TCGGCA

FIG. 14

PEGen 42-Novel

AGGGGTCTTG ATGGACTTGG GTCGGACATC TTAGTGACCT GTGAATTCTT
CTGTGGAGGC TGAGTCTCAC GTAGCCGAGT TTAATATCTG TGCTATTTAC
TAAAGTATCT GCCACCAAAT TGTACCAACT CATAGTTTTA TATGAATGTT
GATGAGTCTG TATCATAAAT AGAATTGTTG ATACATCCTT AATTTGTGCA
ATATTGTATG AAGAAGATTG TTATCAATTA AAACCACGCC TCTTTATGAT
CCTNNNAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA
AACCNCCTCA AATCCATNGG TTCTAACCCA AAACCCT

FIG. 15

PEGen 43-Novel

TTTTTTTTTT CATACACCAT CAAACCAATT TTATTTCTAT AGCAACGTTT
CTCACGTCTG AACCTGAGAA TAAGTCACCA GCTCTTGACA GTAAACATGG
GCCCTATCAA ATTATATTAG ACTCCTCAGT GTCCCGCCAT GTGGCCTTGC
ACCAAATCAA TTAGTTTGAG GGCCAAAATC CTGTTGGGTT TCAAATAAAG
TGTCAGGTCA TAAGGAGGGG GAGGGACTCA ATTCATGGGA ACATTTTTAC
CTGTTCAAAT AGATAAACTG AATTGCCCTA TCTGTGGTCA CCTGGATCCA
AGACCCT

FIG. 16

PEGen 44-Novel

CCCTGACGAT AAATGGTAAG GAACTTTTTT TTTTTTTTTT TTTTTTTTTT
TTTTTTTTNC GAAATAAACA AACACAGCTT ATTATTTGGG GGAACATTAA
NTTCTATAAN TGAACACAAA ANAAAATTAA NANTTAATGG GGGGGTANAA
GGGACTTTGA ATCTATCTGG TATCATGACA TTGAAGCANA NACCTGANTG
ACCAGAAAGA GAGAGAGAGA GAGAGAGAGA GAGAGAGAGA GAGAGGTTTC
ATATGAGCTA GTGTTACAGG CTTTATTAGT CTATTAGTCA GGGACC

FIG. 17

PEGen 48-Novel

AATCGGGCTG GATGGGTGTA TCCGGCACTG TTTCGTAGCG GCAGCAACTG
GGTGCTTCTA TCTGAAAGCG GGCTTCACAA AAACTACTGC GCCACCCGAC
TCGCTGCGGC ATCGCCCGGT GGCGAGTACC GTATCGCCTT TCCTGGTGCA
GAAGAAGTGT TTACAGGAGG CGGTCATTTA CCGCAATCTG ATTCTGTTTT
TTATTCTCCC TGGCGGGTGA TCGCGATCGG CAGTTTGAAA ACGATCGTTG
AATCCACGCT CGGGAATGAT GTGGCTTCGC CGCCAACGCT TACTGACATT
TCATTTGTAC AGCCCGATT

FIG. 18

PSGen 1-80% homology to *B. taurus* supervillin

GCCGAGCTGT GTAAAACCAT CTATCCTCTG GCAGATCTAC TTGCCAGGCC
ACTCCCAGGG GGGGTAGACC CTCTAAAGCT TGAGATTTAT CTTACAGATG
AAGACTTCGA GTTTGCACTC GACATGACCA GAGATGAATT CAACGCACTG
CCCACCTGGA AGCAAATGAA CCTGAAGAAA GCGAAAGGCC TGTTCTGAGG
GTGAGATGAC AGCCACAGAG AGGTCACTGC CACTAGACCA GAAAGTGGAT
GGAGATATAT ATTTGGACTG GTGTTTTTTT CTGTCAG

FIG. 19

PSGen 2-91% homology to human HTLV-1 Tax interacting protein

ATCGGGCTGC AGATTGGAGA CAAGATCATG CAGGTGAACG GCTGGGACAT
GACCATGGTC ACTCATGACC AGGCTCGGAA GCGGCTCACC AAACGTTCGG
AGGAAGTGGT CCGCCTGCTG GTGACTCGGC AGTCTCTGCA GAAGGCCGTA
CAGCAGTCCA TGCTGTCATA GCTGTAGTCA GCCTAGACTT CTGCCCACTG
ACCTTTTNGG GCACTGAGAA CACATCCACG CTCTGTCTGT ATCTAGTTCT
GGCTTCTGCT GTGTGCTANG CCCCAGCTCT GAGGAGTAAC AGCTGATCCC
AAAGGTCCAA GCCAACCTTC TTACCCCTCA GCCCCCANCC CGAT

FIG. 20

PSGen 4-Rat proteasome activator

TTTTTTTTTT TTTGGGCAAC TATGTATTTA TTGTGTTTGG AAGGCAGAGT
GAGGGAGGAG ACCCCAGCAG GAAGAAGACT GGGTGCAGTC TAGAGTTCCT
AGTCAAGAGT AGGAAGGTTT CTGTTATACC CATCATAGAA CGAGAGAGGG
GGCTCAATAG ATCATCCCCT TTGTCTCTCC ACGGGGCTTC TTGAGCTTCT
CAAAGTTCTT CAGGATGATG TCATATAACA CAGCATAAGC GTTACGGATC
TCCATGACCA TCAGCCGGAT CTCCTGGTAT TCCGCCTCGT CCAGCTCGGC

FIG. 21

PSGen 10-Rat Ferritin Heavy Chain

AANATCTGCT TAAAAGTTCT TTAATTTGTA CCATTTCTTC AAATAAAGAA
TTTTGGTACA AATTAAAGAA CTTTTAAGCA GATGTTTTGG TGCAACTAAT
AGAAAAGATA AAGGCAGCCT GACATGCATG CACTGCCTCA GTGACCAGTA
AAGTCACATG NCCTTGGGAC GTCAGCTTAG NTTTATCACN GTGTCCCAGG
GGTGCTTGTC AAAGAGATAT TCTGCCATGC CAGATTCAGG GGCTCCCATC
TTGCGTAAGT TGGTCACGTG GTCACCCAGT TCTTTAATGG ATTTCACCTG
CTCATTCAGG TAATGCGTCT CAATGAAGTC ACATAAGTGG GGATCATTCT
TGTCAGTAGC CAGTTTGTGA AGTTCCAGTA GTGACTGATT CACACTCTTT
TCCAAGTGCA GTGCACACTC CATTGCATTC AGCCCGCTCT CCCAGTCATC
ACGGTCACNT A

FIG. 22

PSGen 12-Novel

TGACGTAGGG CCGAGAGCAA CAAGCACAGA ACTCCTTCTC CAGTTTCACC
CTGATGAAGT TGAGGCACTC TTCTGCACTG GGAGGGGCCA GCCTGGGGGC
CAGGCACATT GGACACCACC TTCCCATGGA CTACAGCGTC AATGCCATTG
CCTTCTATTC CTATACCTTC TAGGGGCTGC CCCTCTTCCC ATTCAGCCAA
CACTGAGTGT TGGGAGATTT CTCTTTTTTA AAAACACATG AGAAAATAAA
TGCACTTTAC TCCCTCCCCA AAAAAAAAAA

FIG. 23

PSGen 13-Novel

GTAGGCAATA AAATGTTTTC AGAGGTGCGA AAAAGCTTTT GTTTTCTTAA
ACCATTCTTA GTCTCTGCCA CACTTGACAC TCCGTCAAAG TGAGAAGCGA
ACTAAAGACC AACTGCGGTG GAAAATATTA TGTTTATGTA ATAAAAAAAA
ATCATGTAAC TGCAAAAAAA AAAAAAA

FIG. 24

PSGen 23-Novel

TGCCGAGCTG AAAACATACA TCCGCACCGG GTTGAGATAG CTGGCCCTCC
GTCCCCGGGC ATACTCTTTG GATAAGAACC CCGGCCTTGT TACCAGGTAC
CGGAGTGAGC TGAAAAATTT ACCGTCGAAA TGGGTGATGT CCTGGAAAAA
ATGGTTCACC AGCTGCCAGG CAGATTCTTT GGGTTCCACA TTTTCCTGCC
CACAGATGTG GCAGAAGCGG TCAAGTAATG CAGCATTACA ATTGAGGCAG
ATCTTTTCTT TTCTTTCCTT GGAGTGGCTC AACCAGCGAT TTTGGTTAAA
AATAATCAAA AAAGCGACGG CAAAACTTTT GTTATATTCC CGCCTGTGGC
ATTTGAACTG TGCCCGGCAA CCGAATAACT TTTAATTTTG AAAATAAAAT
GCATACTAGA TTTTTAGCGG TTGCCTCCTG GCCATTGCTT CAGGCGCCNG
CACAGCGTCA GCCCAGTTTT ACCACNANGA ATATCCTAAG CGTTGAAACA
GGGCACAGCC GAAAAAAACN CTGGCNACAA AAAANATCCG GACATCCTTT
TTCCAATTTT GAAACCGAAN GCNCGCAAAC NAAGGTTCTT CGGGAAAAAA
AATCGCCAAA ATACNCGANA TCAAACTNTC CAA

FIG. 25

PSGen 24-Novel

TGCCGAGCTG GGGGGAGTTC CAGGAATTTG TGGACTATTT CCAGGAGGAA
TTGAGGAATC TAGAAGTAAT AAGAACTTCA CAAGTAGAAC AACAGAGTTA
ATTGACCTCT ATCCTTAAGA GTTACCAGAG AATTATTAAA AAACTAAAGA
ACAATCAAAG CCTGGTCCTG TGCCACCACC CAAAAACATG TATAGCCTAT
GTGCAGCTCG GCA

FIG. 26

PSGen 25-Novel

CTCANAGGGC NNNTTNGNGG NCNTCATGCN CCAGGNTCCN NCCCCCANAN
GANCNNCCNG GTAAACTACA CNGGAGTACT TAAGTGGACA NNCCACATGC
GANGGNCAAG GGGATCACCN TCNCTCCTNC AGNCTNTNCG TGNCTCTCCT
GTNCNTNCAC TGCCNCANAA NGGANGCNCN NNCTCCTATC TGTNTACAGN
AAACNTNGCN CTNNCTCTAA GCTCNCCCAC TNTGTGGAAA GGCNATGTGT
GCGTGCCTCT CCCCTATCAC GGCNGTTTGC NAAANGGGGA TGTNCTGCNC
GGCGATGAAG TTNGGTCACT CCATGTTTCC CAGTCCNACC TGTTAGACNA
AGNATTGNAN TGTGATACGA CTCNCTGTAA GGGGANTNGC GGACCCAGTA
TGTTTGGCCC NACNNCCACT TCTTTAAATG GTGGCTAACG GCGCTTCCTA
GNATAAACAC TATTGGTCCC CCCCTCTGCA GNACCCNTTA CTTCCGNANA
AAAATTGTTG TCNTGATCCG CGACAACCAC ACCGTCTGTN GNTTTTAGTT
GCAACNCNNA TCNCTCCAAA AAAGTTTCAG AAATCTTCAT TTTCCCNGGT
TGAGCCCNTG ACAAACCCCT NAGGATTTGT CGAATGTAAA GTCTCCNGAT
CTTCAATAAA NNTCCAAAAG NCTANCGAT

FIG. 27

PSGen 26-Novel

TCACTGGGCN NNNTGGTNGN CGTCATGCNN NAGGTTCCNN CCCCCNNANG
AACCTCCNGG TAATCTACAC NGGAGTCTTA AGTNGACAAN CCCACACTGC
GANGGTCAAG NGGATCACCA TCNCCNCCTC CCAAGCTTNT NCATTGATGC
TCTCTCTGTT CCGTNCCCTG CCGCTACACA TGGANGCTCT TNCTCCTTNT
CTCNTCTTAC NANNCAAACA TTGCCCTNTC TCATA

FIG. 28

PSGen 27-Novel

GGGAANGGGA NNAAAAAGGA ATTTTTTNGG GGGGGGNTTN TCTGGGAAAN
TTTTTTTTTT TTTTTGGNAA AAANGGGGGG GGAAANAANC CGNTTTTCCC
NAAAACNGGG GGGAACNGGC CGGGGGGGGA AAAAAAAGGG TTACNAAGGG
AAACCTTTNA AANNGGAANG GNTTTGCNNC CCTNTNGAAA NNTTTGCCCC
CCNNNAGGAA TCCCNGGNNA AACCCAANNC CNNCNCNCNG GGGGNCNNTN
CNANGGGACC CCAACNCGGG CCCNAACTNG GGGNAAANAN GGGCAAAACN
GGTNCCCGGG GNAAAANGGT ANCCCCTC

FIG. 29

PSGen 28-Novel

TGCCGAGCTG GGGGTGAAGC ACCGGAAAAC AACCGATCCA TCTCTTATCA
CAGGGTCTCC AAGATCCCAA ACCCAAAAGC CACATTGTTA ATTAGCCTTT
TTATTGTGTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT
TTTTTTTTTT TTTTTTTTTT TTTTTTTTTT TTTTGGCAGC TCGGCA

FIG. 30

PSGen 29-Novel

TACGGGCGCT GATTTTTACG AACATTACCT GGCAGGGAAA TTTGATAAGT
ATCCACTGTG GGTGGCGCAC TACCTGGTAA AAGACAAACC CCGTGTGAAA
AGGCCCTGGA CTTTTTGGCA ACACAACGAA ACCGGCCACG TGAATGGCAT
CCGGTCTTAT GTGGACTTCA ATGTTTTCAA CGGGGACAGC ACAGATTTTG
CCGAACTATT AATGAAATAA TGCAGAATTT CGCTTTTCAA ATAAGCCCAT
GGATCCTGAC GTAAAATATT TCCTGCTGGT GATCGTGCAG TCCATTTCGA
TGCTCATACT TTGGCTGATG CTCAACATGA CCTTTGGGAT CTATTTTAAT
TTTGCTTTCC CCGACAATGG TTTGACGCTT GGCAACATCA TTTATTACCT
CTTCCTGCTG GGCAGCTCGG CA

FIG. 31

PEGen 32-Novel

TNCATANGCC CTGAGGTGGG GACGAAGCCC GAGTCCGTCC TGACATGTTT
CCAGTGGAAA AGATTTTGTT NTGAGCGTTN CTTTCTNNTT TNTTTTNNNT
TGNTTGTTNN ATGTTTTTGT TGTTGTTTTN TTNAAACTGT NTGTTGNCAN
TTCAACATNA ANGGNAGGNA ANTNTGTGNC TNCNTTGCAN TGTNNCATGN
TNCCCANANC CCAAAAAAAA AAAAAAAAAA AAAAAGAGTA CAAATATCAC
AAAATTTGAC ATTTTTGTAA TAATACTTTG GTTGTTGTTT GGTGACGGCG
ATTG

FIG. 32

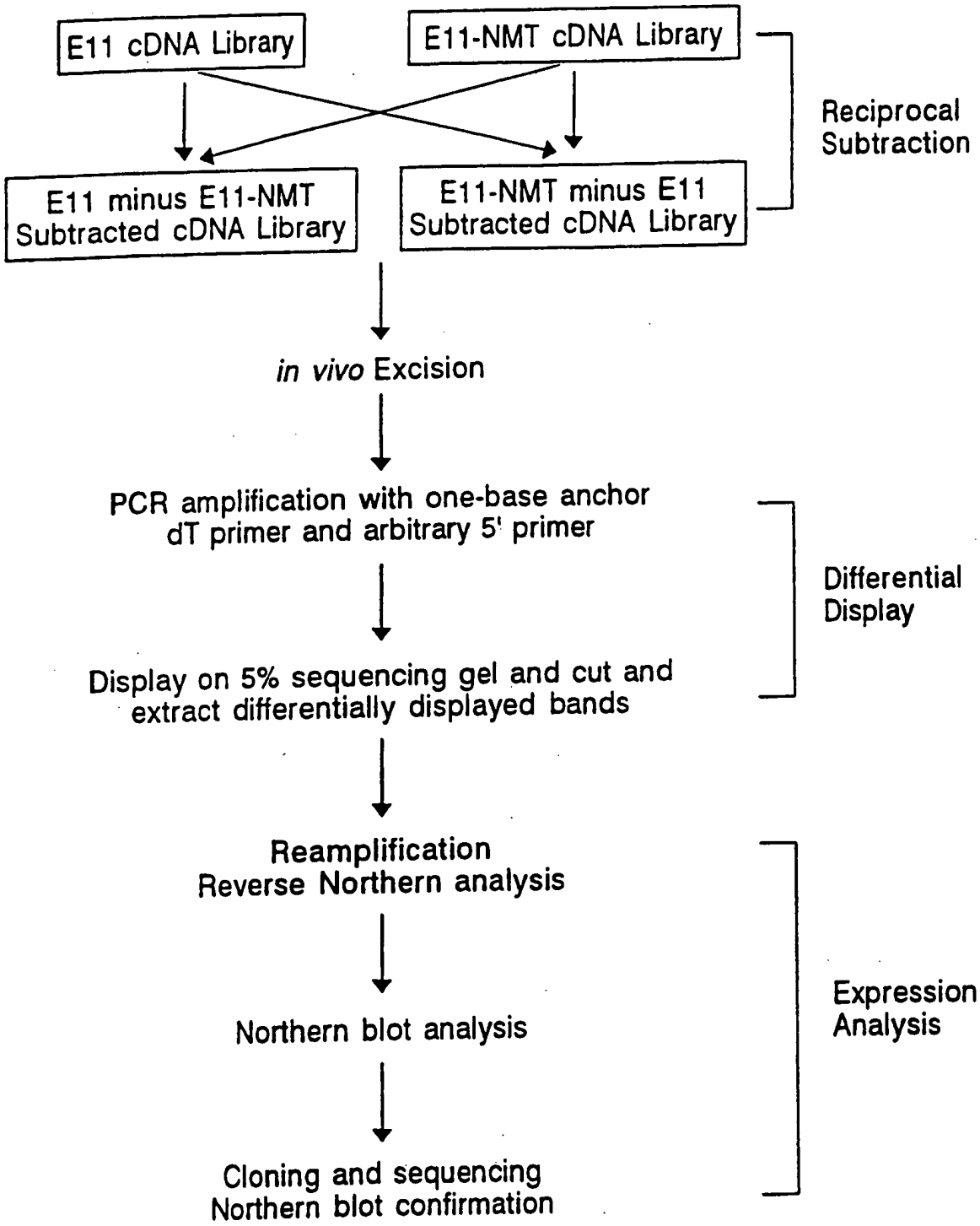
E11 cDNA Library
E11-NMT cDNA Library
Reciprocal Subtraction
E11 minus E11-NMT Subtracted cDNA Library
E11-NMT minus E11 Subtracted cDNA Library
in vivo Excision
PCR amplification with one-base anchor dT primer and arbitrary 5' primer
Differential Display
Display on 5% sequencing gel and cut and extract differentially displayed bands
Reamplification
Reverse Northern analysis
Expression Analysis
Northern blot analysis
Cloning and sequencing
Northern blot confirmation

FIG. 33A

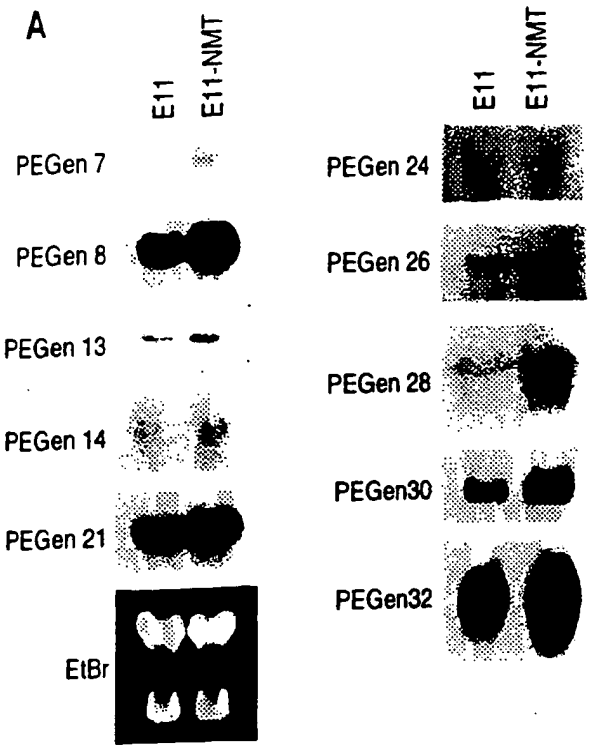

FIG. 33B

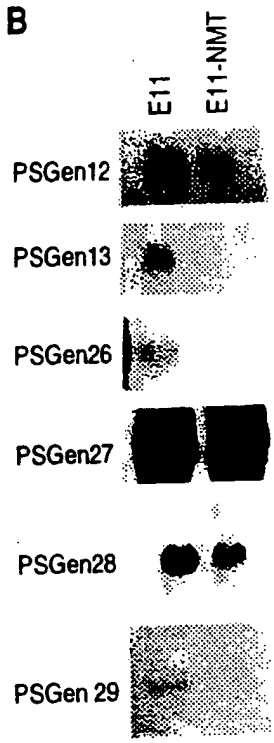

FIG. 34A

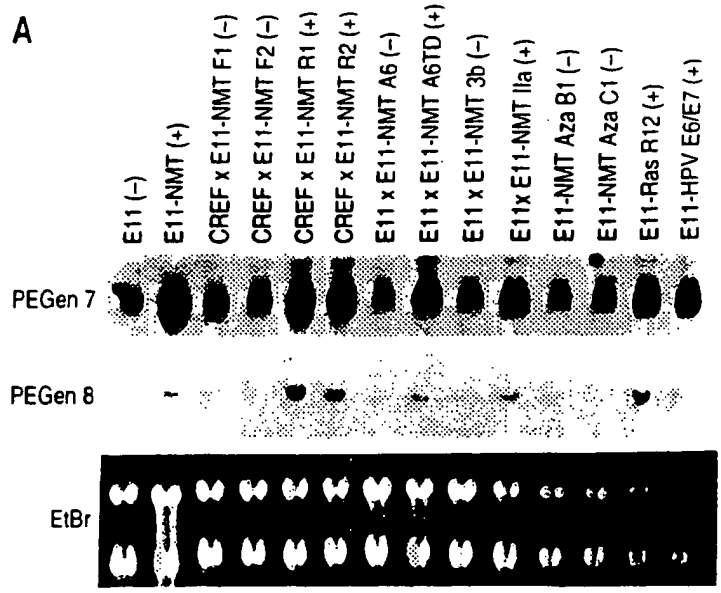

FIG. 34B

FIG. 35A

PSGen 12 cDNA Sequence

GCGGTGGTGA CGGTAGTATG GCCGCACTTT ATGGTGGCGT GGAAGGGGGA
GGCACACGGT CCAAAGTCCT TTTACTTTCT GAGGATGGGC AGATCCTGGC
AGAAGCAGAT GGACTGAGCA CAAATCACTG GCTGATTGGC ACAGGTACCT
GTGTGGAGAG GATCAATGAG ATGGTGGACA GGGCTAAACG GAAGGCTGGA
GTGGATCCTC TGGTACCCCT TCGAAGCCTG GGCTTGTCCC TGAGTGGTGG
GGAGCAGGAG GATGCAGTGA GGCTCCTGAT GGAGGAGTTG AGGGACCGAT
TTCCCTACCT GAGTGAAAGT TACTTCATCA CCACTGATGC AGCAGGTTCC
ATCGCCACAG CTACACCGGA TGGTGGGATT GTGCTCATCT CTGGAACAGG
CTCCAACTGT AGGCTTATCA ACCCTGATGG CTCTGAGAGT GGCTGTGGTG
GCTGGGGCCA CATGATGGGA GACGAGGGAT CAGCCTACTG GATTGCACAC
CAAGCTGTGA AAATTGTGTT TGACTCCATT GACAACCTGG AAGCAGCTCC
TCATGATATT GGCCATGTCA AGCAGGCCAT GTTCAACTAC TTCCAGGTGC
CAGATCGGCT AGGAATCCTC ACTCACTTGT ATAGGGACTT TGATAAGTCC
AAGTTTGCTG GATTTTGTCA GAAAATTGCA GAAGGTGCAC AGCAGGGAGA
CCCTCTTTCC AGGTTCATCT TCAGAAAGGC TGGGGAGATG CTGGGCAGAC
ACGTTGTGGC AGTATTGCCA GAGATTGACC CAGTTTTGTT CCAAGGGGAG
CTTGGCCTCC CCATTCTGTG TGTGGGCTCA GTGTGGAAGA GCTGGGAGCT
ACTGAAGGAA GGCTTTCTCC TGGCACTGAC GCAGGGCCGA GAGCAACAGG
CACAGAACTC CTTCTCCAGT TTCACCCTGA TGAAGTTGAG GCACTCTTCT
GCACTGGGAG GGGCCAGCCT GGGGGCCAGG CACATTGGAC ACCACCTTCC
CATGGACTAC AGCGTCAATG CCATTGCCTT CTATTCCTAT ACCTTCTAGG
GGCTGCCCCT CTTCCCATTC AGCCAACACT GAGTGTTGGG AGATTTCTCT
TTTTTAAAAA CACATGAGAA AATAAATGCA CTTTACTCCC TCCCCAAAAA
AAAAAAAAAA AAAAAAAAAA AAAA

PSGen 12 Protein Sequence

GGDGSMAALY GGVEGGGTRS KVLLLSEDGQ ILAEADGLST NHWLIGTGTC
VERINEMVDR AKRKAGVDPL VPLRSLGLSL SGGEQEDAVR LLMEELRDRF
PYLSESYFIT TDAAGSIATA TPDGGIVLIS GTGSNCRLIN PDGSESGCGG
WGHMMGDEGS AYWIAHQAVK IVFDSIDNLE AAPHDIGHVK QAMFNYFQVP
DRLGILTHLY RDFDKSKFAG FCQKIAEGAQ QGDPLSRFIF RKAGEMLGRH
VVAVLPEIDP VLFQGELGLP ILCVGSVWKS WELLKEGFLL ALTQGREQQA
QNSFSSFTLM KLRHSSALGG ASLGARHIGH HLPMDYSVNA IAFYSYTF·

FIG. 35B

PSGen 13 cDNA Sequence

GGCACGAGCT CTCCTCGTCC CCTCCCTTCT CCACTGCAGC CTTTCTCTTA
GCCCGAACCA CTTCCTTCTT CTGCTTGTTC CTCCCTAGGG CGCGGAAGCT
GAGTGCAGGG TTCAGACCCA CGCGGCGAGC AGCTCTTCAG TGAAGAAGGA
AGCAATCGGA GGGTCAGCAA TGAACGTGGA GCATGAGGTT AACCTCCTGG
TGGAGGAAAT TCATCGTCTG GGTTCCAAAA ATGCCGATGG GAAACTGAGT
GTGAAGTTTG GGGTCCTCTT CCAAGACGAC AGATGTGCCA ATCTCTTTGA
AACCGTTGGT GGGAACTCTG AAAGCCCGCA AAACGAAGGA AGATTGTTAC
GTACGCAGAA GAGCTGCTTT TGCAAGGTGT TCATGATGAT GTTGACATTG
TATTGCTGCA AGATTAATGT GGTTTGCAGA TCTGGGGGTA TCTGGTAAAC
TGGAATAATT AAGTTAAAGG ACAAACATGA AGTTCCTTAT GTATTTTTAT
AGACCTTTGT AAACAAAAGG GGACTTGTTG AGAAGTCCTG TTTTTATACC
TTGGAGCAAA ACATTACAAT GTAAAAATAA ACAAAACCTG TTATTTTTTT
TTTCTTAAGA AGGTAATCGG GAGACGTAGG CAATAAAATG TTTTCAGAGG
TGCGAAAAAG CTTTTGTTTT CTTAAACCAT TCTTAGTCTC TGCCACACTT
GACACTCCGT CAAAGTGAGA AGCGAACTAA AGACCAACTG CGGTGGAAAA
TATTATGTTT ATGTAATAAA AAAAAATCAT GTAAAAAAAA AAAAAAAAAA

PSGen 13 Protein Sequence

MNVEHEVNLL VEEIHRLGSK NADGKLSVKF GVLFQDDRCA NLFETVGGNS
ESPQNEGRLL RTQKSCFCKV FMMMLTLYCC KINVVCRSGG IW·

FIG. 35C

PEGen 28 cDNA Sequence

GTGTGGTGTG TCTCTCAGAC GTCCGTGACA CTTTGATCCT GCCCTGCCGG
CACCTGTGCC TCTGCAACAC CTGTGCAGAC ACCCTGCGCT ACCAGGCCAA
CAACTGCCCC ATCTGCCGGC TGCCCTTCCG GGCACTGCTT CAGATCCGAG
CCATGAGGAA AAAATTGGGC CCTCTGTCTC CAAGCAGCTT TAACCCCATC
ATCTCTTCCC AGACTTCGGA CTCTGAGGAA CATTCATCCT CAGAGAACAT
CCCTGCGGGC TATGAAGTGG TGTCTCTCCT GGAGGCCCTC AATGGGCCCC
TCACCTCATC CCCAGCGGTG CCTCCCCTTC ACGTTCTTGG AGATGGCCAC
CTCTCAGGAA TGCTGCCGTC CTATGGCAGT GATGGCCACC TGCCCCCTGT
TAGGACACTG TCCCCCCTTG ACCACCTGTC TGATTGCAAC AGCCAAGGGC
TCAAACTCAA CAAGTCTCTC TCCAAGTCCA TTTCCCAGAA TTCTTCTGTG
CTTCACGAAG AGGAAGATGA GCGCTCTTGC AGTGAGTCAG ACACTCAGCT
CTCTCAGAGG CTGTCAGCCC AGCATCCTGA AGAGGGACCT GATGTGACTC
CAGAGAGTGA GAACCTCACG CTGTCCTCCT CAGGGGCTGT TGACCAGTCA
TNTTGCACAG GGACTCCGCT CTCTTCCACC ATCTCCTCCC CAGAAGACCC
AGCCAGCAGC AGCCTGGCCC AGTCAGTCAT GTCCATGGCC TCCTCCCAGA
TCAGCACTGA CACCGTGTCC TCCATGTCTG GCTCCTACAT TGCACCTGGC
ACAGAAGAAG AAGGAGAGGC CCCACCTTCC CCCCGAGCTG CTAGCAGGGC
CCCTTCAGAA GAGGAGGAGA CCCCAGCAGA GTCCCCAGAC AGCAATTTTG
CTGGCCTTCC AGCTGGAGAG CAGGATGCAG AGGGAAATGA TATCATGGAG
GAAGAGGACA GATCCCCTGT GCAAGAAGAT GGCCAGAGGA CATGCGCATT
TCTAGGCATG GAGTGTGACA ATAACAATGA CTTTGACGTC GCGAGCGTGA
AAGCACTGGA CAATAAGCTG TGCTCTGAGG TCTGCTTACC CGGTACCTGG
CAACATGATG CCGCCATTAT CAACCGTCAC AATACCCAGC GCCGGCGACT
ATCACCCAGC AGCCTGGAGG ACCCTGAGGA GGACAGGCCT TGCGTATGGG
ATCCTTTGGC TGTCTGAGGG CACTGGCACC TGTACCTGGG CTTCCCCTCC
TGTCCGCCTT CCATCTGTCC TCACTGGACC ACAGGCCTTC TGGGCATCTT
CAACAAGACA CGTGGACTTT CTACTCTCAT GAAGGGAGGA CAGTGCAACC
CTCCACCAAC TTCATCTCCT GTAACCATGA TTCTTACCCT CTCAGAAAGT
ACCAGAAGCC TTCCTCCTGT GGGCTGATGT GTGCCAGCCA AACCCAGTGG
GTCAGCTGAG CTGAGGGTCA GGGCTGGTTG TTTCTGTAGC CTTTTCTCTT
CCAAATGGAG ACCAACGAGA AANAAAAAAA AAAAAAAA

PEGen 28 Protein Sequence

VVCLSDVRDT LILPCRHLCL CNTCADTLRY QANNCPICRL PFRALLQIRA
MRKKLGPLSP SSFNPIISSQ TSDSEEHSSS ENIPAGYEVV SLLEALNGPL
TSSPAVPPLH VLGDGHLSGM LPSYGSDGHL PPVRTLSPLD HLSDCNSQGL
KLNKSLSKSI SQNSSVLHEE EDERSCSESD TQLSQRLSAQ HPEEGPDVTP
ESENLTLSSS GAVDQSXCTG TPLSSTISSP EDPASSSLAQ SVMSMASSQI
STDTVSSMSG SYIAPGTEEE GEAPPSPRAA SRAPSEEEET PAESPDSNFA
GLPAGEQDAE GNDIMEEEDR SPVQEDGQRT CAFLGMECDN NNDFDVASVK
ALDNKLCSEV CLPGTWQHDA AIINRHNTQR RRLSPSSLED PEEDRPCVWD
PLAV·

FIG. 35D

PEGen 32 cDNA Sequence

GGCACGAGGC GCCGCCTTCC TGCTCGCGCC CTATCGCCGC CTTCCTGCTC
GCGCCCTATC GCCGCCTCCG AGTCTTCCTG CGCCCCGGGC TTCCGCCGCT
TCATTGATTT CCGTTTCTCG CCGCTGCAGC CTCCTGACAC GGTGATCCGG
GCGGGCCCCG CAGGAATTTT ATCCCCTCAC CGGCCTCACA CTAGTGTCGC
ATGTCCACTA TCCAGAACCT CCAATCTTTC GACCCCTTTG CTGATGCAAC
TAAGGGCGAC GACTTACTCC CGGCAGGGAC TGAGGACTAC ATTCATATAA
GAATCCAGCA GCGGAACGGC AGGAAGACGC TGACCACTGT GCAGGGCATT
GCGGACGATT ATGACAAAAA GAAACTTGTG AAAGCTTTCA AAAAGAAATT
CGCCTGTAAT GGGACTGTGA TTGAACACCC TGAGTACGGA GAGGTCATTC
AGCTTCAAGG CGACCAAAGG AAGAACATTT GCCAGTTTCT TTTGGAGGTT
GGCATCGTCA AGGAGGAGCA GCTGAAGGTT CACGGATTCT AAGATGAACC
CGAACATGTG GCGAGTTTCT TAAATGGTTT TGTTGTCTAA CTCAGTTTGG
CTGCCTCGGG AGATGATTCT TTACAGTAAA CGACAGACTT TGCGTTTATT
AAATCATTCA GACTTCCACT CACGCCTGCA TGGCTACAGA AAACATGGGG
TATGTAGGCT CCTAAGTCAC AAGGAAATCG CCGTGAGGTG GGGACGAAGC
CCGAGTCCGT CCTGACATGT TTCCAGTGGA AAAGATTTTG TTCTGAGCGT
TCATTTCTAG TTTATTTTCA CTTGATTGTT AAATGTTTTT GTTGTTGTTT
TATTAAACCA TGTATGTTGC AGCTTAACAA TAAAGGAGGA AAGTCTGTGC
GTCAAAAAAA AAAAAAAAAA AA

PEGen 32 Protein Sequence

MSTIQNLQSF DPFADATKGD DLLPAGTEDY IHIRIQQRNG RKTLTTVQGI
ADDYDKKKLV KAFKKKFACN GTVIEHPEYG EVIQLQGDQR KNICQFLLEV
GIVKEEQLKV HGF·

FIG. 35E

PEGen 42 cDNA Sequence

GGCGTTGCGA CGTGGACATG TCGGCGTCGT TGGTCCGCGC CACCGTGCGG
GCCGTGAGCA AGAGAAAACT GCAACCCACG CGGGCGGCGC TCACGCTGAC
CCCCTCTGCT GTGAACAAGA TAAAACAACT TCTTAAAGAC AAGCCTGAGC
ATGTGGGTCT GAAAGTGGGT GTGCGGACCA GGGGCTGTAA CGGCCTCTCT
TACAGCCTGG AGTATACAAA GACAAAAGGA GATGCTGATG AAGAAGTTAT
TCAAGACGGA GTCCGAGTGT TCATCGAGAA GAAAGCCCAG CTAACCCTGT
TAGGCACAGA GATGGACTAT GTGGAAGACA AACTGTCCAG TGAGTTTGTG
TTCAACAACC CCAACATCAA GGGAACCTGT GGCTGCGGTG AAAGCTTTAA
CGTCTGAAAG CTGAGGACTG CAAACTCCAG GAGAGCTGGG TCTGCCTTGG
AGCACACCGA AGAAATCATG TGATGTCCCG TGTCGGAAGT TAGTGTGTGG
CTGCCTCGTG GTTGAGAATA AAGTGAAGCA TTGAAAATCA AGCCAGCGTG
TTAGAGTTCC AAAAACATGG TGTCTGTTCT CTGTAAGACA CAAATGGAGA
GAACATGGTG TCTGTTCTCT GGAGGACACA AACTGAGAAA CTGTTGAGTC
CTCTGTCCTG TACAGAAAAC TCCTACCCTG CCCTTACGCT GTAGCCTGCT
CTGTGCTAGA ACCAGCTTCG TGACCATTGC TTTGCTGGGA ATTGAGGAAT
GGGATAACGG GTGTGCACCT GGGTCACAGA ATGGCTTGAG ACTGTCTCCT
GGCCCTGTCT CACCTCAGGC AGGGCAGCTG TGGGAGCAGC AGCTGTGGGA
GCGGTGAGGG GACCTGGTTT CCCTCACCTG TGGCGTGGCC CGTTGCATCT
TTACCACGTG CCTGTTGTCA GATACCTCAT TTGCCAGCCT CCAGCAAGCT
CAGCTATGAG TGCCAGTCTC AGGAGGTAGG GATCACGGGC CTGGTGTCAG
TCTGTCCTCT GGGGCGTGCT TCATGCGGTT TGCTTAGACC TTTCAGTTAG
AAGCGCTTGT GATGAGCAGC CAGGTAGACC TGCTGAGAGC GTGGTTCTCA
GAGCTTCTGC CCAGCCCTCC TCACAGGTCA CAGCAGACAG TGCTGTCTGA
GACACTCGGT GAGGAGACAT CCTGCCTGGC CAGTGCTCTT ACCAGTTTAG
AGACTGCATT AGTTTTCTCT TGAATGGAAG CCTTGTGTAA ACCCTTTTGT
CTGAATGGCC ATCCTGTTTA GAGCTTTGAA CCAGTAGTGT CTTCCTTCAG
AAGATCTGCA GCAGAGGGGT CCCTCTCAGC ACGGCACCTG GGGGGCAGAA
CATGCACACA CTTACAGTTG CCAGGGTGCA GATGCTCCCT GCTTCCCAGA
GGAAGCTTCT AAGTTTCTTT AATGTGGTCA TCACCAGTTT TTTGAGCCAT
GGTTTTGCTG TATACTACAG GCCAGCCTTG AACCCACAAC AATCCTCCTG
CTTCCACGTT CAGAGGCATG TGCTACCACA CCTGACCTGG ATCCCAAGTT
TCTCTTTAAG TGGTCTTGAT GGACTTGGGT CGGACATCTT AGTGACCTGT
GAATTCTTCT GTGGAGGCTG AGTCTCACGT AGCCGAGTTT AATATCTGTG
CTATTTACTA AAGTATCTGC CACCAAATTG TACCAACTCA TAGTTTTATA
TGAATGTTGA TGAGTCTGTA TCATAAATAG AATTGTTGAT ACATCCTTAA
TTTGTGCAAT ATTGTATGAA GAAGATTGTT ATCAATTAAA ACCACGCCTC
TTTATGATCC TAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA
AAAAAAA

PEGen 42 Protein Sequence

RCDVDMSASL VRATVRAVSK RKLQPTRAAL TLTPSAVNKI KQLLKDKPEH
VGLKVGVRTR GCNGLSYSLE YTKTKGDADE EVIQDGVRVF IEKKAQLTLL
GTEMDYVEDK LSSEFVFNNP NIKGTCGCGE SFNV·

FIG. 35F

PEGen 45 cDNA Sequence

ACGAGCTGAA GGTCACTTCG CGCACGGGTT GGACCTGGGG CAGGTTGGAG
GAGTAGGAGT ATGTCATTGG GCGCGAAGAC GGGGTCTGGG GCAAAAAAGA
AGGGAGGCTG GAGAAATCTG GACCCGAGAC GTAGTAAGTA CAACTTGGCA
AATACATGTT AGAGGAGCAG GGACCACGCT CATCAAAATC CATCATTGGG
CTACCTTGGG CTCTCCGCAG TAGCCGAGCT TAACATGATT CTCCACTGCA
GCTGCCTCTT TGAAGCGGAT CCGTGAAGTA GAAATTTGGA GACGTAAGCT
GACGTGGAAA TCTATCCCCA TCCTTAGCAG GGAGGTGCTG GTCATGTGAC
CCGATGTTGA AATTGACAAG CCGCGAGCTA GTCCCGGCTT TTTTTTTTTA
ACCCCCCTCC CTTTCCTTTT TTCCCCCTCC CCTCCCTCCT CGGCTTCCTT
TCTTTGTAGC CACCTCAGGG GAAGCAACAG ATCGTCACTC GGTGTTCTCA
CCGAAAGCAC GTAATCGCCG GTGTAACTCA TGTTGGCTGG GGGGCCTCCC
CGCTCGCAGA AAGGCTGGGG TGCGCCCCCA AGCAGCTTTC CTTTGCTCAG
CTGCATGGTC CTGGTCCACG AGCGCTCTGA GGGCGGCAAG AGAGCGCAAC
TCCTGACGCC TCCCCCCACT CCCCGGTGGG TGAGGGATGC TCTGGGATGG
GGGTGGCCAG GTGAACGCCC GGAATTGTGT AGCTTCAGGT TCCGGAGTCT
GTTGTCCGAA GGCTTACGTT CAGCACCTTC TTCGCAGTCC CCCTCCCACA
GACTTGCTCT GGAAAGCACC TCAGTCTCAG AATCTGGCTG GACCCCATTT
GGGGCCAGGC TTCGCAGCCA CGATGTGCCG GGCTTCGTGG CTTGTCCGAT
TTGCACGGTG ACTTGATTAC ACGCTCTCAT TCATGGTCAC TTCCGAAGCG
CTTTAGTGCC TTCCGTCCCC AAACCGCCAA CAGGCAAAGC GGCTTTCCTC
CGCGGTTTGT CAATAATCCG CGCTGTCCGG AAGGGCTTCG CCTTACCCGG
GTTCCACCTT CCCTGTATCT TTCTGCTTAC TTCCTCATCC CACACTCTGT
CCTTGGAGGA ACCCCTTCTC CTCGCTGCCT GTAGGGGTTC GGAGTGACTC
CACAGAGCCA GAGGCGCTTC TGCTCACCGG TCCGCAAGCT GCCTGGTCTG
CTGAAGCTGA CGAATCGGGA AACCATGCAA TTGAGGCGAA CCTTGGGCTG
CTTTAGAGGC GCTGAGGAGC CTTCTCCTGG GAGGCCCAAG GTCGATTTCA
GCCCACCAGG ATCTGGGGAA GACCCAACTA GGGGTAAGAG CACACCGGAA
GGCCAAGTCC GAGTTCCAGT CCTAGAAGAG GCGGCTGCGG GCAAGGTTAT
GACATTGGCC CTGGACACTG GTTTCCCAGG AGCTATTCTT TCTCAAGAAC
TCCACAGCAC GGGGCTGTCT CCAGAAAATA CTCTTCAACG TTTATTTCCT
TTAATCGTCA ACCCGCAGCC CTACGGCGGT TAATGCGAGA GGCCAAAAAT
GTTTGGAGGA AGAAAAACAA AGGCAGGAAG TGGCCGCGGC CTGACGGTGC
GTGTGTGTCT GTAAAGAAGG GAGGGAGCCG GTTCAATCTC TTCTTTTTTT
CCCCGAATTT CAAGGTTTAG GCAGACCCCC GTAGGGCCTG GCCGAGGCTC
ACCCGGCGGA GCATTTGGAG GTGGCCAATG AGTAAGGCTC GTCGGGCTGA
AAGGCTAAGA AGGAGATTTG ATCGGCAGAA CAAACCAAGC CTTTTTGGAG
GTTTCTTCTG ATTTGGTCCT AAAGGGTATA TGCTAGTGTC CACAGCGGCT
CCTGTGGCTG CTGTTTTCCT CCTGTCGGAC TAAATGTACC AAGAAGGGAG
AGAGATTGAG GCACCTTGCG CGCTCCTCTC TCCTTCCGAG GTAGAATATC
AGAATAAAGT GTATTCAGGT GCCAA

FIG. 35G-1

PEGen 50 cDNA Sequence

A:

ATCGGGCTGT ACTAACAGAT TGTTTGTAAA CAGTGACACA GTGATAACTT
CCGTGTTACT TCTTAACTTT ATGTTTCTGC TTTCAGATCT CCCTCCCCTT
CCAGAGGAAG TTAGCGATGC CATAGCTTTA ATGTCTGTTT TAGCTGCAAA
ACTCATTGTT CACTTTCTGT TAGAAAATCT AAAGCAGGTG GTATGCAATT
TCTCTTGATT TGGAATTCTT TAAAGGCAAG TAAATTTGGA ACTCCTGTGT
TGGGGGGTTA ACGGAGGTAG GAACCCAATG GTGTGTCCCT AGGTCGTCCC
CGTTCTCGGA TAGCACAGTC TGCATAGCCA TAGCTCTCAA TTATGTCACT
ACCCTAATCA TCGCAGCCCG GTTCTCACGG ACTCTTTGAA GTCCCAAAAT
GACTTTTGTT TGATCCTGAT TTGGATTTTC AATGGAAAGT AAAAGCTTGG
GGTGAGGAAG CAGCAGCTAA AGCAGGGAGT TGAGCCAGTG AATTGCTGAC
GGAAAGGATT CTGGTCTTGG AGGAGGGGGA CCTGAAGCAG AAGGAAAAGG
GATCCTTCGC TTAAGTTCTT AGGAAAAATC TTGACTCAGA ATCCCAAGAT
TTTTCCCTTC ATCCCAGCCG GGTAAATATT TGGTTTTGTC TTTTAAGTAT
AGCATGAAGC CCGTGGATGA GAGCCATGTG TTGTAGGATT CTCTTCCCTA
TTGGCTCTGA GCTTGTGTCA CCGTATCAGT TTGCTCCCTA CAAAGGGACC
TAGTTTGGAA AGGATTGGAA GGGCAACTGT TCAGCGGCAA TGGAACACCC
AAACGTGGAC TGGGACAACG GGATTCTGAT AAAGGGAAAT TTCTGGTCTG
GTCCTGGCTG TGTCATAGCT CTTTATGTGT GCATGGAGAG CTCTTGATCC
AAGTAGAATA TGTAACAATA CAGACCAGGA TCTTCCAGTC AGTACTGCTG
GGTGGAAGTG GGCGGGTGAT GGTAGTTGCT AGAAGAATCA TTAAGACAGC
ATCTGCGGTG AATGCGTCCC AAAGCCTCGC GGCATCAGTT TCATCTCTAA
ACCATTAGCT TACAGTTGAT TCCGTTTCCT GGGACAGAGA AACATCCCCA
CGCGAAGTGA CTGTGTTGTG TATTCATAGC ACTGCAAATA AATTCACGCG
CCATGATGAA ACCTTGCAAA TACGCTTTGA CCAAAAAAAA AAAAAA

FIG. 35G-2

B:

GGGTGTGGGG CAGCTGGGTG GGAGCAGCGT GCAGGCTACC AGCACCAAGT
GGTGTGCCTC TCCGGGGGTG TGTGCAGAAG GCTCCTGGGG AAAACTGCAC
AGGTACCACC CCTAGACAGA AATCGAAAAC CCACTTCTCT CGGTGCCCCA
AGCAATACAA GCATTACTGC ATCCATGGGA GATGCCGCTT CGTGATGGAC
GAACAAACTC CCTCCTGCAT CTGTGAGATA GGCTACTTTG GGGCCCGGTG
TGAGCAGGTG GACCTGTTTT ATCTCCAGCA GGACAGGGGG CAGATCCTGG
TGGTCTGCTT GATAGGCGTC ATGGTGCTGT TCATCATTTT AGTCATTGGC
GTCTTGCACC TGCTGTCATC CTCTTCGGAA ACATCGCAAA AAGAAGAAGG
AAGAGAAAAT GGAAACTTTG AGTAAAGATA AAACTCCCAT AAGTGAAGAT
ATTCAAGAGA CCAATATTGC TTAACTTAAT GATTATAAAG TTACCACAAG
CTGATGGCGA GCTCCAAAAG ACCTGACTCA TTTGCAGATG GACAGGACAT
GTCTCAGGAA AACAGCTTGC AGAAATGAAT GTTTAAATAT TGTATTTGCT
TTTTCATTTT ATTTGTAACT GTGTGTTGTT ATTGTTTTTA ATAATGATAT
TTTTGTTACA GTCTGATAGC TGAGAAAAAA ATGACCTGGT TAGGTGACGA
CAATAAGGGA CATTGAATAT AAACTTTGTT GCTAGGATTA TTAAACAAAC
AAAATTTGGA AAGAAGTTAG ATTTTAAGAA CTGAGTCATG GTCAGGCAGC
GATGGCACAC ATCTTTAATC CCAGCACTTG GGAGCAGAGG CAGGTAGATC
TCTGGGAGTT TGAGGTCAGC CTGGTCTACA AAGCAAGATC CAGGGTAGCC
AAGGTTATAT AGAGAAACCC TGTCTCACAA AACCAAACCA ACCAATCAAC
CAAACAGCAA AACACCTGAG TCGATAAAAG GGCTCCCCAG GTTTATACAC
TTACCGTATG CTAAGAGCTT GAAATATATT GTTTCGTTTT ATCGTTCAGT
AGTCTGTGAG ATTGCATTTT TTCTCATTCC TATATATAAA AAAGTTAAAT
GATTTCCCTT AGATGTAGAG ATAGAGGAAG TTAGCGATGC CATAGCTTT

FIG. 36

PSGen 27-Novel

NTCNNCTTNN CNNNGGCTGA TATCNGGCNC TTCNTCCNCG ATCNCAGATA
CNNGCNCACC GGNNNTNTCN GNGGTNATCN TCCNCCATCT CTCNTCCCCG
ACNTGCACTC CGGGTNTNNT ACACNGGACA CTGTATCNNA CAGNAAACCT
NCCCNGGCCC CAGGGATCAC CATNCCTCGN CCCNGCNTGT NTATAANATC
AGGNNNTACA TCNANGAACN NACTATCACN GNTCTCTNTT NNCTCAGTGT
NCACCTTCCA CTNCNGAANC TNNTCGCTNC NCCNCNGTTG GGAAAGGCGA
NCNGTNCCGG CNACATGCCG TTTNCGNCNT CTGNNCACNT GGGGATCTNC
TNCAANGNAA TCAATTNGNG TAACCCACGG TTTNCNCAAT CACTACTTCT
CANNCNANGG CCNTTGAANT GTTATCCCAC CACCANGGGG CNANTCGGGA
CCTNACAATT CATCCTCAGC CGGCCCCAGN CTTAAAAAAT TCAAAGGNCN
CTTGCCCGCN TTNTTNCCTT AGCCCGCCNC CNGACAACAN CCNANNAACA
ACCCCCNNTC TTANGTTGCN NANCCCACAG GANNTTGNNA TACCGGGTTT
CCCCNGAAAC TNCTCAANGC CNCCGTTCCA ACCCCCGTTA CGAAACCGTN
CCCNTTTCCT TCCGAGNTTG CCTATTAANN CCCCCNAAGT TCTNCTTCGT
TNGNTTCCTC CGAAANG